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HIV/STI prevention among heterosexually active Black adolescents with mental illnesses: Focus group findings for intervention development

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Abstract

Heterosexually active Black adolescents with mental illnesses are at increased risk for sexually transmitted infections (STIs), including HIV. However, few HIV/STI prevention interventions exist for this demographic. We held 7 focus groups ($N = 33$) to elucidate social, cultural, and psychological factors that influence HIV/STI risk-related sexual behaviors in this understudied population. Seven themes emerged: (a) Blackness and media portrayals, (b) Blackness as a source of cultural resilience and pride, (c) psychosocial determinants of condom use, (d) consequences of engaging in sexual activity, (e) attitudes and beliefs toward sexual behaviors, (f) benefits of sexual activity, and (g) coping mechanisms. Participants also supported the feasibility of and interest in HIV/STI prevention programs integrated with mental health treatment. Transportation, potential breaches of confidentiality, and time were noted barriers to participation. Psychoeducational, skills-based programs are needed to address the sequelae of mental illnesses as they relate to the sexual decision-making process in adolescents.

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Keywords

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HIV is a global health crisis. Sexual activity is the primary mode of HIV transmission among adolescents in the United States (Centers for Disease Control and Prevention [CDC], 2016b). Nationwide, more than 4 in 10 high school students have ever had sexual intercourse, and 11.5% have had sexual intercourse with four or more persons in their life (CDC, 2016d). Rates of sexually transmitted infections (STIs) among adolescents ages 15 to 19 are steadily increasing (CDC, 2016c). In fact, estimates have indicated that one in four sexually active adolescent females has an STI (Forhan et al., 2009). Of note, the presence of another STI substantially increases HIV acquisition risk (Ward & Rönn, 2010). All adolescents, however, are not equally affected, with Black adolescents bearing the brunt of HIV disease burden. Black adolescent males and females, ages 13 to 24, were diagnosed with HIV at a rate 3.3 and 4 times that of their White counterparts, respectively (CDC, 2016b). Black adolescents also account for the largest number of new HIV infections among heterosexual adolescents nationwide (CDC, 2016a). In areas such as Philadelphia, near equal numbers of newly diagnosed HIV cases among Blacks were attributable to male-to-male sexual contact (48.8%) and heterosexual contact (44.5%; Philadelphia Department of Public Health, 2015). This epidemiologic profile indicates that, in addition to much needed work with young Black men who have sex with men, there remains a critical need to advance HIV/STI prevention science for heterosexually active Black adolescents.

Individual behaviors (e.g., non-condom use, having sex under the influence of drugs/alcohol) are well documented contributors to HIV/STI risk (Chen, Thompson, & Morrison-Beedy, 2010; Danielson et al., 2014), and certain populations are at heightened risk given increased rates of these risk behaviors. For example, in addition to developmentally appropriate sexual exploration associated with adolescence, adolescents with mental illnesses engage in more HIV/STI risk-related sexual behaviors than the general adolescent population (Brawner, Gomes, Jemmott, Deatrick, & Coleman, 2012). Researchers attribute this difference to poor judgment, limited impulse control, and deficits in problem-solving skills related to psychiatric disturbances (Brown et al., 2010). While HIV seroprevalence among adolescents with mental illnesses remains unknown, rates among adults with mental illnesses are significantly higher than those without mental illnesses (Cournos & McKinnon, 1997).

Heterosexually active Black adolescents with mental illnesses report that they use sex to achieve intimacy with others (Brawner, Davis, Fannin, & Alexander, 2012), which may explain higher rates of sexual activity in this group (Brawner, Gomes, et al., 2012; Brown et al., 2008). They also tend to express more negative views toward condom use, which may explain their lower rates of condom use (Brawner, Davis, et al., 2012; Brown et al., 2008; Reece et al., 2010; Sales, Latham, Diclemente, & Rose, 2010; Seth, Raiji, DiClemente, Wingood, & Rose, 2009; Swenson et al., 2010). Black adolescents with mental illnesses are at the intersection of three populations overly burdened by HIV/STIs–Blacks, adolescents, and persons with mental illnesses—yet few HIV/STI prevention intervention strategies exist

for this group (Brawner, Fannin, Reason, & Weissinger, 2016). The richness of qualitative data contextualizes HIV/STI risk and can be used to inform such intervention work (Wilson et al., 2016). The purpose of our study was to develop a better understanding of social, cultural, and psychological factors influencing HIV/STI risk-related sexual behaviors among heterosexually active Black adolescents with mental illnesses. The long-term goal was to inform the development of future HIV/STI prevention interventions for this demographic.

METHODS

Our research was approved by the institutional review boards at the University of Pennsylvania and the Philadelphia Department of Public Health. The larger study, designed to develop and test a psychoeducational HIV/STI prevention intervention for heterosexually active Black youth with mental illnesses, was conducted from January 2012 through December 2016. The focus group component of the study reported in this paper was conducted from February 2013 through April 2013. Participants ($N = 33$) were recruited from outpatient mental health treatment programs via flyers, waiting room encounters, and provider referrals. Study inclusion criteria were: (a) ages 14 to 17 years, (b) self-identify as Black (inclusive of African American, Caribbean-American, etc.), (c) currently receiving outpatient psychiatric services from a community behavioral health provider, (d) have ever had vaginal sex (given the focus on heterosexually active youth), (e) able to speak, read, and write in the English language, and (f) able to provide signed informed consent. Participants were excluded for cognitive deficits that would impair their abilities to complete the study procedures (i.e., active psychosis, developmental disability; ascertained by trained staff at the time of screening), active suicidality, or if they had unstable contact information (i.e., homeless, no permanent address, no land line/mobile phone; this was done for focus group scheduling purposes). Parental permission was not required; in Pennsylvania adolescents ages 14 and older can consent to mental and sexual health treatment without parent/guardian permission (Brawner & Sutton, 2017; Juvenille Law Center, 2006). A 10-member youth community advisory board convened monthly to serve as member checks for the investigators' interpretations.

Upon arrival for the focus group, participants chose a pseudonym (most selected celebrity names) to maintain anonymity during the group discussion. Immediately following signed consent, they completed a 10-minute anonymous electronic survey on sociodemographics, sexual behaviors, and interests in HIV/STI prevention programs. The 2-hour mixed gender, audio-recorded focus group discussions began thereafter. The semi-structured focus group guide (see Table 1) was informed by the Theory of Planned Behavior (Azjen, 1991). According to the theory, an individual's intention to perform a behavior (e.g., have multiple sexual partners) was the strongest predictor of his/her resultant behavior. Further, it was purported that one's intentions were influenced by behavioral beliefs (e.g., attitudes toward multiple sexual partners), normative beliefs (e.g., subjective norms among referent others about multiple sexual partners), and control beliefs (e.g., perceived behavioral control over the number of sexual partners) toward the behavior. Thus, the guide included items such as: *What is good about using condoms during vaginal sex? How would it be hard to have just one partner? How do teens make themselves feel better when they feel sad, angry or lonely? What are the main reasons that teens have sex?* We also asked participants their thoughts on

interventions delivered through mental health treatment programs to prevent HIV and other STIs. This included open-ended questions about facilitator type (e.g., age, race, educational background), intervention content and activities, and recommended incentives for participation. Seven groups were conducted with three to eight participants per group. The groups were conducted by the first and fourth authors—both had had extensive training and experience in focus group methods. Trained undergraduate and high school research assistants assisted with notetaking during the sessions. Participants received $30 cash compensation.

DATA ANALYSIS

The audio recordings were transcribed verbatim by an external transcription company. The first and fourth authors led the qualitative analyses. They read through the transcripts several times to obtain a sense of the data; excerpts from the transcripts were presented to the research team during weekly meetings. The data were analyzed using NVivo 10 (QSR International, 2010) through content analysis as outlined by Graneheim and Lundman (2004). Briefly, the transcripts were divided into meaning units (related words, sentences, or paragraphs; Graneheim & Lundman, 2004), which were then condensed into a description close to the text, and further condensed based on the investigators' interpretations of the underlying meanings. These condensed meaning units were labelled as codes. Given that the study had a guiding theoretical framework, deductive codes were created in addition to these inductive codes to ensure we captured potential theoretical mediators for intervention development (e.g., "condom use - bad"). In order to ensure consistent application of the codes, the coding structure was finalized by the research team prior to coding all of the transcripts. Discrepancies between the coders were brought to the team and final decisions were approved by the group and applied to the data for analyses.

Once coding was completed, codes were organized into categories (similarly grouped content) and divided into sub-categories. Lastly, the underlying meanings of the categories were formulated into sub-themes, which were then organized into themes. In this particular method, a topic does not have to be mentioned a certain number of times to constitute a theme (Graneheim & Lundman, 2004). Instead, themes represented a thread of the underlying meaning in the aforementioned analytic steps. We also ran a word frequency query in NVivo to highlight key words that came up in the discussions (see Figure 2). The survey data were analyzed using SPSS 19 (IBM SPSS Statistics, 2011). Descriptive statistics are reported.

RESULTS

The sample was predominantly male (54.5%) with an average age of 16.1 (see Table 2). The most common self-reported current mental health diagnoses were depression (36.4%) and attention deficit hyperactivity disorder (30.3%). Less than half (45.5%) used a condom every time they had sex. On average, participants initiated sexual activity at age 13. They also reported an average of 7 (n = 29/33), 3.8 (n = 20/33), and 3 (n = 2/33) vaginal, oral, and anal sexual partners since initiating each type of sexual activity respectively.

Table 3 provides examples of how meaning units were ultimately formulated into themes. As participants described what it meant to be young Black males and females in the United States, the concept of "Blackness" arose in the investigators' interpretations. Seven themes emerged from the discussions: (a) Blackness and media portrayals, (b) Blackness as a source of cultural resilience and pride, (c) psychosocial determinants of condom use, (d) consequences of engaging in sexual activity, (e) attitudes and beliefs toward sexual behaviors, (f) benefits of sexual activity, and (g) coping mechanisms (see Figure 1). Exemplar quotes for each theme are provided in the format of (*Gender*, Focus Group [FG] Number); because the surveys were completed anonymously, we were not able to report corresponding ages for the quotes.

Results from the word frequency query indicated that "know", "people", "sex" and "think" were the most commonly used words (larger; see Figure 2). Others such as "Black", "HIV", "talk", and "condom" were also commonly used.

BLACKNESS AND MEDIA PORTRAYALS

Participants reported that Blacks were often negatively portrayed in the media, and that this influenced Black culture as well as how other races viewed Blacks. They discussed how Black youth were heavily influenced by these messages. It was explicitly stated across several groups that when media outlets, such as reality TV shows and rap videos, flaunted material items and glorified violence, degraded women, and promoted unprotected sex with multiple partners, youth internalized these messages and lived them out. As one participant shared:

> Sometimes, like, especially, like, music and reality TV, you sometimes you got all these Black reality shows and stuff. It makes it really look bad for Black people. Like, "Wow, look at how all these Black people carry themselves," like how they talk about just doing every girl and selling all these drugs; and it's not really cute.
>
> (*Female*, FG1)

BLACKNESS AS A SOURCE OF CULTURAL RESILIENCE AND PRIDE

While media portrayals of Blacks were viewed to be detrimental, individual associations with and sentiments of their Blackness were described as sources of resilience and pride.

> Also, when you think of a Black woman, you know, you think of, you know, all the things that we make [referring to inventions] because people always put us down telling us we can't do this; we always going to end up on the street shot or dead. And then to know that we was one of the people that made it, most of the people that was Black, you know, made it.
>
> (*Male*, FG3)

"It [being a Black American man] means to be free, strong. You should be hardworking and independent" (*Male*, FG7).

Participants discussed challenges for Blacks, noting the strength of African Americans, in particular through slavery, and affirmed learning about being Black and their culture through

family members and history classes. Stereotypes were discussed about race, specifically racial profiling against African American men: “Like when you walk past a cop—they’ll frisk you down for no reason” (*Male*, FG 5). Participants viewed those close to them as strong and resilient despite the hardships Blacks continued to overcome. This resilience and pride was believed to buffer against sexual risk behaviors when Black adolescents valued their self-worth: “I don’t care about fitting in. I’m just letting them know I ain’t a piece of, you know, trash” (*Male*, FG5).

PSYCHOSOCIAL DETERMINANTS OF CONDOM USE

Condom use was described to be more consistent with one-night stands than partners with whom adolescents had sex multiple times, or where trust had been developed.

> I know a lot of friends that, if they have a steady partner that they’ve been with for over 6 months, they’re not going to use no condom. I feel like I trust this person enough. They don’t got nothing, and I don’t got nothing.
>
> (*Male*, FG2)

As trust increased, condom use was reported to decline. Participants described how attempting to initiate condom use after condomless sex could be perceived as a sign of infidelity. A female participant echoed the sentiment of mistrust expressed by a male participant: “Yeah me too, say like, we ain’t been using a condom all this time and he came out of nowhere, ‘Babe, let’s use a condom’” (*Female*, FG2).

Hedonistic beliefs (i.e., condoms don’t feel good) were also discussed, and condom use was viewed as burdensome. “When it comes down to it and they about to hit [have sex] and they don’t feel like it [using condoms], they’re not gonna strap up” (*Male*, FG6). “Some friends, they’d be like ‘Girl having sex without a condom is the best. It feels so good’” (*Female*, FG1). Social norms among sexual partners, family, and friends that promoted condom use, however, were believed to increase condom use: “My sisters tell me about sex, ‘this what you can get from it, make sure you safe’” (*Female*, FG3).

CONSEQUENCES OF ENGAGING IN SEXUAL ACTIVITY

Teen pregnancy and HIV/STIs were the primary identified consequences of sex. The groups stated that if teens were not ready to have a child/communicate with their parents about pregnancy, they might opt for abortion: “My friend, he just got this girl pregnant…but she aborted it, and her parents didn’t know, and he didn’t know” (*Male*, FG1). One male speaker also described how even if condoms were used, there was still no guarantee that people would be protected against HIV/STIs. His strategy was to get tested: “When I strapped up, I was still getting checked out” (*Male*, FG5).

Several groups also had lively discussions about secondary virginity, or choosing to abstain after sexual debut. They believed that once someone started having sex it was harder to get them to stop than it would be to initially delay sexual debut. “They probably say, yeah [to stop having sex]…but then like…in the next 10 hours you see them talking to another shorty and like you come back over there to them, I thought you was quitting?” (*Male*, FG6). While secondary virginity was perceived to be difficult, participants still supported it as a practical/

relevant strategy to avoid the consequences of sexual activity. In discussing a decision not to have sex, one participant stated:

> I don't necessarily trust all these boys because I know if you having sex with me, you have sex with—all them other girls. So I don't know what them girls got. They probably gave you something, and you ain't giving it to me.
>
> (*Female*, FG2)

ATTITUDES AND BELIEFS TOWARD SEXUAL BEHAVIORS

Participants viewed sex as a normalized symbol of relationship progression; sex became "unavoidable" the longer you were in a relationship. With this, and the perception that almost all of their peers were sexually active, some noted that they initiated sex so as not to "miss out" on anything.

> Like, say somebody really talking about that and you a virgin and everybody just, like, "Yeah, like, we be getting that poppin", like, talking about their sex life; and you and your boyfriend's sex life all boring, all y'all doing is kissing, like, y'all in kindergarten. So y'all want to spice it up. So you wind up having sex.
>
> (*Female*, FG2)

Gender double standards emerged as (mostly male) participants shared that males were expected to have a higher number of sexual partners, while females with more sexual partners are perceived to be less desirable. This was noted by males and females to lead to over- and under- reporting of sexual partners. "Some people just want to do it because the more sex partners they got the cooler they are" (*Female*, FG3). While most forms of sex were acceptable, some viewed anal sex as "nasty and dirty": "Um, I wouldn't even respect that female if she told me she wanted anal sex" (*Male*, FG2). Anal sex was the least frequently reported sexual behavior, but two participants endorsed having anal sex on the survey.

BENEFITS OF SEXUAL ACTIVITY

Participants shared that at times when they were stressed, sex was beneficial to relieve stress or take their minds away from their problems. As one male (FG3) stated, "Having sex is a stress reliever." Sex was also a means to make them feel "loved", and they reported that some people their age used sex to show and receive love. One female participant (FG1), however, remarked about how sex wasn't the only way to express love and care: "Just show the person that you care or show this person that other people can care about you in other ways other than having sex." They described how they turned to sex when they wanted to be entertained, fit in with their peers, seek revenge on a sexual partner, or needed something fun to do. The lack of recreational facilities and funding in the city were believed to affect sexual activity because youth were "bored and had nothing else to do."

COPING MECHANISMS

Coping mechanisms helped adolescents deal with their feelings. Most of the conversations centered on being sad, angry, or depressed, and participants almost never expressed that they were happy. The majority of the coping strategies clustered in two categories: (a) seeking out

internal calm and relaxation (e.g., writing, listening to music), and (b) substance use and sex for emotional relief. “Like, I could just listen to music, and it will calm me down” (*Female*, FG1). “Sometimes your friend be the one trying to get you to smoke, like ‘Yo, smoke with me because you’re going to feel better’” (*Male*, FG4). They also described emotional restriction wherein adolescents hold in their pain, which only leads to “build up” and “snapping out” (i.e., fighting). “You know, go do something bad, start trouble. Go rob somebody. Yeah, bullying. Make yourself feel better” (*Male*, FG4). “Sometimes that [talking] don’t work, and you’ve got to get aggressive with these males” (*Female*, FG4).

HIV/STI PREVENTION INTERVENTIONS FOR BLACK ADOLESCENTS WITH MENTAL ILLNESSES

The survey results showed that the majority of participants were in favor of integrating HIV/STI prevention interventions into mental health treatment (see Table 4). Only six (18.2%) noted that they would be *very unlikely* or *unlikely* to participate in an HIV/STI program offered through a mental health program. Eighty-five percent indicated that teaching teens about sexual health in mental health treatment programs would be a *good* or *very good* idea. Only three (9.1%) indicated that if their mental health provider offered a program on sexual health they would not participate. Opportunities to learn about sex and health (21.2%) and receiving money (18.2%) were the most commonly reported factors that would make intervention participation easy. While many (33.3%) did not think that anything would make it hard to participate, having a boring program (9.1%), not feeling comfortable in a room with judgmental people (9.1%), and transportation issues (6.1%) were the most commonly reported barriers.

Regarding ideas for intervention group structure, closed groups/staying with the same cohort were also preferred. As one participant stated, “Me, personally, I don’t want a whole new group of people to come in because I don’t like telling everybody my business” (*Male*, FG2). Potential for breaches in confidentiality by group members were a perceived barrier to participation, but across the focus group discussions the participants talked about the benefits of having small group versus individual sessions to hear each other’s perspectives and learn more. Two participants, however, explicitly stated a preference for individual sessions, as one noted: “I think because it’s like I’d rather talk to one person one-on one, then having to talk to everybody else and everybody else isn’t understanding” (*Female*, FG4).

A theme across the groups was that they wanted a facilitator close to their age who understood their day-to-day activities and struggles: “A regular person who’s actually out there, like, dealing with life. They actually did it. I don’t want nobody that never did it before telling me…because they never been through it” (*Male*, FG3). While a few participants noted that “Some people listen to the nurse and some people listen to somebody from the block” (*Male*, FG5), the overwhelming majority believed the facilitator should not be an adult health care provider. They described how youth would not be able to relate to a physician or nurse in that setting. While racial concordance for the facilitator was not perceived to be important by the majority of the participants, it was important to note that one male participant was adamant that the facilitator’s race mattered to him:

> If you got a room full of Black kids, you bring a White person in and he start talking, “Yeah, I lived the hard life”…I look at it as if, “You White and you try to come in and try and give me a speech on how I’m feeling or what’s going on in my mind?” No, I’m not listening because I know he didn’t face the same challenges I face.
>
> (*Male*, FG6).

Recommended incentives for participation included providing free HIV/STI testing and money. The groups believed the program should be offered after school during the week (e.g., between 4 and 7 pm); weekend activities were strongly discouraged, as participants reported adolescents would be less likely to attend. One group discussed an increased likelihood of participation if the program was held in the summer months. Across the groups, the benefit of having mixed gender intervention sessions was also highlighted: “It probably would be better with the girls and the boys, though, because it’s got to be easier for them to hear us” (*Female*, FG2). Participants believed that mixed gender groups would create opportunities for mutually beneficial, candid dialogue about sex and relationships. They described being able to role play scenarios with the opposite gender in a way that would be more beneficial than same gender activities. They were also, however, in support of the idea to include gender-specific content where the group would temporarily be divided into separate gender-specific sessions to process sensitive material (e.g., learning condom use negotiation strategies before having to role play with the opposite gender).

Suggested topics included HIV and other STIs, how to get tested for HIV/STIs, strategies for consistent condom use, substance abuse, and “patience” to delay sexual activity until ready (instead of giving in to peer pressure). Suggestions for activities to have in the intervention included fun education about flavored condoms for oral sex, live condom demonstrations, board games to reinforce the intervention content, visuals to depict the rapid spread of HIV/STIs via multiple sexual partnerships, videos and music, and role plays/skits to practice the content. An emphasis was placed on making sure the activities were fun and engaging to prevent boredom and attrition. They were also in favor of holding a closing rites of passage ceremony to celebrate participant accomplishments at the end of the intervention. Specific strategies were also discussed to address the roles of mental health and emotion regulation in HIV/STI risk. Suggestions included having a talking circle where participants could be validated by the group to “feel like they’re loved,” and tossing a ball so that whoever caught it would have to share their emotions/how they felt in that moment.

The need for greater involvement in extracurricular activities with trusted role models was also evident across the groups. At some point, each of the groups discussed taking field trips, visiting other cities, and learning from multiple people in settings outside of schools and clinics. They believed that their families and friends would approve of their participation in this type of program, although two people reported on the survey that their friends would disapprove.

DISCUSSION

We sought to develop a better understanding of social, cultural, and psychological factors that influenced HIV/STI risk-related sexual behaviors among heterosexually active Black adolescents with mental illnesses. The findings highlight areas to target in HIV/STI prevention programs for this demographic, and could have implications for other groups. Most notably, contextual nuances uncovered in the seven themes (e.g., sex as a means of dealing with emotions) could be used to tailor intervention content. For example, with the psychopathology of mental illness, the inclusion of education and skills-building toward more positive coping strategies in HIV/STI prevention programs might help adolescents avoid risk behaviors, such as substance use and HIV/STI risk-related sexual behaviors. Our findings also suggested that the target demographic would be amenable to HIV/STI prevention strategies offered in concert with mental health treatment.

Similar to other studies (Teitelman, Tennille, Bohinski, Jemmott, & Jemmott, 2011; Vasilenko, Kreager, & Lefkowitz, 2015), condom use was perceived to be influenced by partner type, trust, attitudes, and norms about condoms and sexual pleasure. HIV/STI interventions should address these phenomena, including strategies to maintain condom use long term. Our findings indicated that this would have to be done in a way that accounted for negative views toward condom use, particularly if the individual had already engaged in condomless sex with his/her sexual partner. This would be especially true in a context where media exposures promote multiple sexual partners. The focus group discussions underscored the importance of challenging media messages that reinforced stereotypes about Blacks in order to improve sexual health outcomes for Black youth (Adams-Bass, Bentley-Edwards, & Stevenson, 2014; Stevens et al., 2017). This could be done through developing positive media messages that portrayed strong Black identity and pride, as well as emphasized positive ways to deal with feelings such as anger or sadness that don’t involve sexual risk behaviors. We also affirmed that strategies to delay sexual debut should take precedence given the difficulty to refrain once sexually active (Donenberg, Bryant, Emerson, Wilson, & Pasch, 2003; Grossman, Tracy, Charmaraman, Ceder, & Erkut, 2014); however, secondary virginity can be presented as an option, particularly for those having sex without fully desiring it. While the participants discussed benefits to sexual activity (e.g., stress relief), alternatives to sex should be presented to help decrease risk. The myth that all adolescents are sexually active and sex is expected as relationships progress also needs to be combated (Lanier, Stewart, Schensul, & Guthrie, 2017).

Unique affective concerns that were perceived to influence sexual risk behaviors in the target demographic of Black adolescents with mental illnesses should be attended to in HIV/STI prevention programming. However, there was also substantial overlap between our findings and those reported in the general Black adolescent population without mental illnesses. These similarities led us to question whether Black adolescents in general, regardless of mental health status, would benefit from interventions that included psychoeducation strategies. As holistic practitioners, nurses have historically engaged in this work and are in a prime position to advance the science in these areas. Regardless of their work settings, nurses will encounter adolescents in need of sexual health assessment and intervention. Our findings can be used to determine the types of questions to ask during sexual health

screenings (e.g., *It is great that you are using condoms, would anything cause you to change your mind and stop using them later in the relationship?*), as well as to develop novel intervention strategies to help youth reduce their HIV/STI risk (e.g., small group activities on the relationships between sex and emotions).

There were several limitations of this research. The small sample size limits generalizability; however, the sample was adequate to reach saturation (no new concepts emerged) for our qualitative study. The positive response to incorporating HIV/STI prevention interventions in mental health treatment may have been due to selection bias introduced in the convenience sampling method. Lastly, holding mixed gender focus group discussions may have restricted the information that was shared by the different genders. However, having participants engage in conversation at the same table opened opportunities to explore dynamics among heterosexually-active youth that would have been lost by separating male and female participants (e.g., responses to reported gender double standards, group processing of norms that affect Black youth). Further, the richness of the data and the ensuing dialogue between the genders on hot topics confirmed the appropriateness of this approach and richly inform future HIV prevention efforts.

CONCLUSION

Despite limitations, our findings offer important contributions to the literature. Of great importance, the study added a voice that is largely absent from the literature—a clinical sample of Black adolescents with mental illnesses at risk for HIV/STIs. The study also highlighted barriers and facilitators to intervention implementation, as well as strategies to engage adolescents in the intervention content. Relevant behavior interventions must be designed in partnership between the target community and researchers (Protogerou & Johnson, 2014). Psychoeducation skills-based programs can be designed in partnership with Black adolescents with mental illnesses to address the sequelae of mental illnesses as they relate to the sexual decision-making process. It will be critical to acknowledge the role of structural and contextual factors (e.g., limited available resources) in this research, given that these factors may drive HIV/STI risk above and beyond individual behavior, and to avoid further marginalization of this population (Brawner, 2014; Hallfors, Haydon, Halpern, & Iritani, 2016). Additional research is needed to translate such contextual knowledge into evidence-based HIV/STI prevention intervention curricula. Nurses are well-positioned to lead this charge.

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Key Considerations

- Black youth are disproportionately affected by HIV/STIs.
- Mental illness and emotion regulation are documented contributors to increased HIV/STI risk in this demographic.
- When sex is used as a means of relieving stress and/or coping with negative emotions, it can cause youth to engage in unsafe sexual practices (e.g., multiple sexual partners, condomless sex).
- Black youth coping with mental illnesses appear to be interested in learning strategies to improve their sexual health, including programs through their mental health providers.
- Nurses should assess what clients dealing with mental illnesses know about HIV/STIs, and contribute to the development of evidence-based interventions to help them reduce their HIV/STI risk-related behaviors.

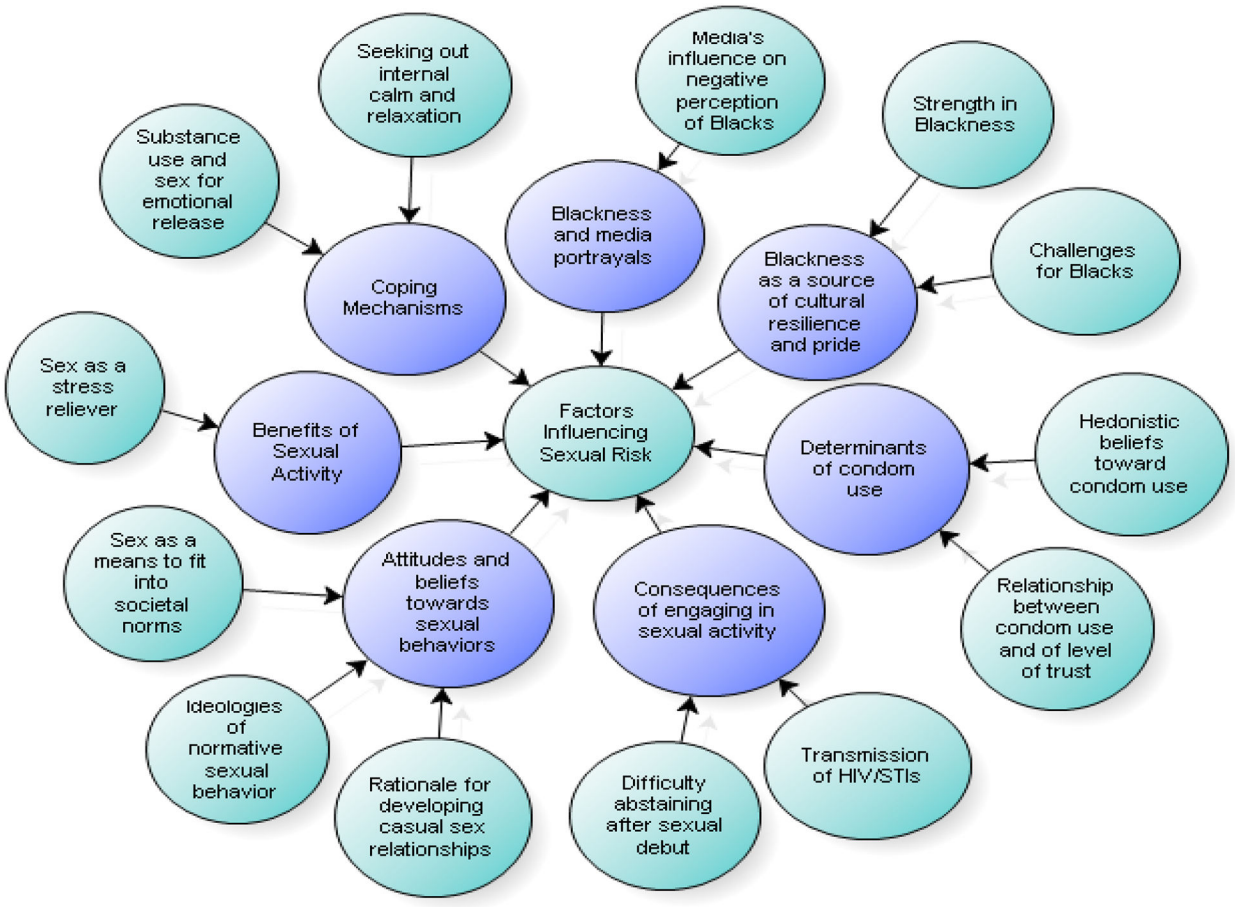

Figure 1.
Focus group themes with selected sub-themes.

Figure 2.
Results of the word frequency query.

Table 1.

Example questions from the semi-structured focus group guide.

Targeted Construct	Example Questions
Gender and Cultural Pride	• *For the boys*, what does it mean to be a Black man? What makes you proud to be a Black man? What are some things that make it hard to be a Black man? • *For the girls*, what does it mean to be a Black woman? What makes you proud to be a Black woman? What are some things that make it hard to be a Black woman? • How do things like television, the internet and music affect Black culture? (Probe for awareness of media influences on thoughts and behaviors)
Coping Skills and Emotional Regulation	• What are some general emotions that people your age experience? (Probe for happiness, excitement, overwhelmed, sadness, impulsivity, anger, etc.) • What do they do with these emotions? (Probe for ways they express emotion such as sharing, keeping it in/bottling it up, crying, exploding, etc.) • How do teens make themselves feel better when they feel sad, angry, or lonely? Would any of those things cause them to get in trouble or experience negative consequences? If so, how?
Teens and Sex	• How do people your age know when they're ready to start having sex? • What types of things do people your age talk to their sexual partners about? (Probe for daily problems and challenges, negotiation of sexual activities, etc.) In what ways do their emotions affect what they talk about? • How do teens handle it when their partner wants them to do something sexually that they might not be comfortable doing? (probe for unprotected sex, "trains"/ "taking one for the team", and different types of sex [e.g., anal sex])
General HIV/STI Knowledge, Attitudes and Beliefs	• Are people your age concerned about getting HIV/STIs? Talk to us about whether you think they should be. • What are some things that people your age do that put them at risk for HIV and other STIs? (Probe for early sexual debut, noncondom use, multiple sexual partners and having sex while high or drunk) • What are some things you think are causing higher HIV/STI rates among teens with mental illnesses? (Probe for depression, impulsivity, alcohol, poor judgment)
Condom Use	• What makes it easy to use condoms? (Probe for HIV/STI and pregnancy prevention) • When teens are caught up in the moment, what makes it easy or hard to stop and put on a condom? • What happens when people are in a sexual relationship but can't agree on using condoms? How can someone convince their sexual partner to use condoms if the partner does not want to?
Multiple Sexual Partners	• What is good about having only one sexual partner at a time? • How would it be easy to have just one partner? • What do you think about being in a relationship with someone who you know has another sexual partner?
Sexually Active vs. Abstinent	• What are some reasons teens might want to stop having sex? (Probe for fear of pregnancy or HIV/STIs, concern about number of partners, parent reactions) • What is bad about choosing to stop having sex? • If a teen decides to stop having sex, what should they do if their sexual partner(s) still wants to have sex?

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Targeted Construct	Example Questions
HIV/STI Prevention Program Development & Logistics	• What do you think about incorporating an HIV/STI prevention program into mental health treatment? What about running the sessions in small groups of 8 teens? • What are some things that you have not been taught about relationships, sex and HIV/STIs that you wish someone had told you? • If you had all of the money and resources in the world, how would you go about stopping the spread of HIV/STIs?
Recruitment Advice	• What is the best way to let people know about the study when we approach them? (Probe for words to say or not to say) • What worked when we recruited you? • If someone hears about our program but isn't sure if they want to participate, what kind of information should we give them to let them know about the study in case they change their mind? (Probe for Facebook or Twitter information, flyer, letter, business card, palm card)

Table 2.

Focus group sample characteristics ($N = 33$)

Variables	Total Participants ($N = 33$)
	***N* (%)**
Gender	
Male	18 (54.5)
Female	15 (45.5)
Living Condition	
In a house that my parent/guardian owns	14 (42.4)
In a house that my parent/guardian rents	8 (24.2)
In an apartment that my parent/guardian rents	1 (3.0)
In a shelter	1 (3.0)
Other[a]	9 (27.3)
Grade in School	
9th	9 (27.3)
10th	10 (30.3)
11th	9 (27.3)
12th	3 (9.1)
Other[b]	2 (6.1)
Current Mental Health Diagnosis[c]	
Depression	12 (36.4)
Anxiety	6 (18.2)
Post-Traumatic Stress Disorder	3 (9.1)
Eating Disorder	1 (3.0)
Attention Deficit Hyperactivity Disorder	10 (30.3)
Schizophrenia	4 (12.1)
Conduct Disorder	2 (6.1)
Other	4(12.1)
No Diagnosis/Diagnosis Unknown	8 (24.2)
Currently in a Relationship	
No	7 (21.2)
I have a boyfriend/girlfriend/steady partner	14 (42.4)
I am casually dating, but nothing serious	12 (36.4)
Other	
Frequency of Condom Use in the Past 3 Months	
Never	5 (15.2)
Sometimes	12 (36.4)
Every time	15 (45.5)
Refused to answer	1 (3)
	mean (std.)
Age	16.1 (0.9)

Age at First Vaginal Sex (n = 29)	13.2 (2.1)
Age at First Oral Sex[d] (n = 20)	13.8 (1.8)
Age at First Anal Sex[e] (n = 2)	9.5 (10.6)
Number of vaginal sexual partners since first vaginal sex (n = 29)	7.0 (7.2)
Number of oral sexual partners since first oral sex[d] (n = 20)	3.8 (2.5)
Number of anal sexual partners since first anal sex[e] (n = 2)	3 (2.8)

[a] One participant reported living with her boyfriend, eight participants were part of a group held at a group home.

[b] One participant reported being out of school and another attended an alternative education program.

[c] Some participants had multiple diagnoses

[d] One outlier case was excluded (age at first oral sex reported as 1 years old with 200 oral sexual partners)

[e] Two participants endorsed engaging in anal sex, one had the first encounter at age 2 and subsequently had 5 anal sexual partners

Table 3.

Examples of meaning units, sub-themes and themes from the content analysis.

Meaning Unit	Condensed meaning unit Description close to the text	Condensed meaning unit Interpretation of the underlying meaning	Sub-theme	Theme
Like, say somebody really talking about that and you a virgin and everybody just, like, "Yeah, like, we be getting that poppin', like," talking about their sex life; and you and your boyfriend's sex life all boring, all y'all doing is kissing, like, y'all in kindergarten. So y'all want to spice it up. So you wind up having sex.	Continuing abstinence is difficult if/when peers discuss sexual relationships and how much they are enjoying it.	Teens do not want to feel like they are behind their peers, or like they are missing out on something everyone else seems to be enjoying	Sex as a means to fit into societal norms	**Attitudes and beliefs towards sexual behaviors**
I guess because you really like this person -we been in this committed relationship for so long, so had to make that step; and we need to have sex.	Having sex after gaining trust and being in a committed relationship for some time.	Sex is a step in the natural progression of a relationship	Ideologies of normative sexual behavior	
Yes I know this from example. She gonna lie and say that she's a virgin—So he waiting to take her virginity then come to find out, she wasn't a virgin. She had like, four bodies. Nobody will never know how many [sexual partners] I have.	Virginity is valued in girls and sometimes girls lie about their sexual history to make themselves more appealing to boys.	Honesty/Dishonesty about sexual history.		
You just can't do it a lot because then you're going to start getting immune to the feeling of one person. Keep switching it up.	Having sex with the same person will become dull and boring.	Changing partners frequently will keep sex fun and exciting.	Rationale for developing	
Some people just want to do it because the more sex partners they got the cooler they are.	Number of sexual partners has a direct relationship to popularity.	Socially acceptable and encouraged to have many sexual partners.	casual sex relationships	
Um, I wouldn't even respect that female if she told me she wanted anal sex, like. *KD FG2*	Passing judgment on a partner that suggests engaging in an unfamiliar or undesired sexual behavior.		Disgust and judgment of sexual behaviors	

Table 4.

Survey responses on integrating HIV/STI prevention intervention into mental health treatment ($N = 33$)

Variables	Total Participants ($N = 33$) N (%)
Likelihood to participate in HIV/STI program offered through mental health program[a]	
Very unlikely	3 (9.1)
Unlikely	3 (9.1)
In the middle	15 (45.5)
Likely	7 (21.2)
Very likely	1 (3.0)
Teaching teens about sexual health in mental health treatment programs would be a	
Very bad idea	0
Bad idea	1 (3.0)
In the middle	4 (12.1)
Good idea	13 (39.4)
Very good idea	15 (45.5)
If my mental health provider offered a program on sexual health, I would participate	
Strongly agree	6 (18.2)
Agree	13 (39.4)
In the middle	11 (33.3)
Disagree	1 (3.0)
Strongly disagree	2 (6.1)
What would make it easy for you to attend this type of program?[b]	
Receiving money	6 (18.2)
Learning about sex and health	7 (21.2)
Perceived personal risk (e.g., sexually active, HIV/STI history)	2 (6.1)
Knowing someone who is participating	3 (9.1)
Short time commitment	1 (3.0)
Already being interested in the topic	6 (18.2)
Related response not provided	8 (24.2)
What would make it hard for you to attend this type of program?[b]	
Boring program	3 (9.1)
Nothing	11 (33.3)
Transportation issues	2 (6.1)
If no one you know is participating	1 (3.0)
Not receiving money	1 (3.0)
School conflict	1 (3.0)
Bad weather	1 (3.0)
Time	1 (3.0)
Judgmental people/feeling uncomfortable	3 (9.1)
Related response not provided	9 (27.3)

[a] Only 29 of the 33 participants responded

[b] Responses were hand coded from open-ended survey questions